

REMARKS

Initially, Applicant expresses appreciation to the Examiner for the courtesies extended in the recent in-person interview held with Applicant's representative. The amendments and remarks presented herein are consistent with those discussions. Accordingly, entry of this amendment and allowance of the pending claims is respectfully requested.

The Office Action, mailed May 15, 2007, considered and rejected claims 1, 12, 14, 15, 17 and 19-21. Claims 1, 12, 14, 15, 17 and 19-21 were rejected under 35 U.S.C. § 102(e) as being anticipated by *Sie* (U.S. Patent No. 7,024,679).¹

By this paper, claims 17 and 20 are amended, claims 1, 12, 14, 15 and 19 cancelled, and claims 22-26 added. Accordingly, following entry of this amendment, claims 17, 20, 21 and 22-26 are pending, of which claims 17, 22 and 26 are the only independent claims at issue.

As discussed during the interview, Applicant's claims are generally directed to a system and an apparatus for background recording of content. As reflected in claim 22, for example, a recording system within a set-top box is described for recording selected channels without decoding them so as to not degrade the recording quality of the selected channels. Such a system includes a single tuner that tunes a multiplexed signal to a particular transmitter of the content provider's delivery system. A demodulator is coupled to the single tuner and receives the tuned signal directly from the tuner and is adapted to demodulate the tuned signal and output a multiplexed transport stream containing at least one channel of audio and video data. A transport demultiplexer is also coupled to the demodulator and receives the multiplexed transport stream directly therefrom. The demultiplexer further can isolate a particular channel of video and audio data. Connected to the demultiplexer is a storage medium that receives and stores the particular channel of video and audio data in an encoded format. A decoder is further included and coupled to both the demultiplexer and storage medium such that when the particular channel is stored on the storage medium, the decoder accesses previously stored encoded data and decodes

¹ Although the prior art status of the cited art is not being challenged at this time, Applicant reserves the right to challenge the prior art status of the cited art at any appropriate time, should it arise. Accordingly, any arguments and amendments made herein should not be construed as acquiescing to any prior art status of the cited art.

the previously stored data, whereas when encoded data is not being stored, the particular channel is received directly from the demultiplexer and decoded into a displayable format for display.²

As also noted during the interview, while *Sie* relates to a content delivery system, Applicant respectfully submits that it fails to disclose or suggest a system as recited in the pending claims. For example, among other things, the cited reference fails to disclose or suggest a system or apparatus in which programming content is received and processed by a tuner and demodulator, after which it is passed directly to a transport demultiplexer for selection and isolation of a particular channel, and thereafter passed directly to a storage medium, as recited in combination with the other claim elements. Indeed, *Sie* expressly discloses a system in which the flow of the multiplexed transport stream output from the demodulator to a storage medium is interrupted or does not go through a demultiplexer.

Specifically, *Sie* discloses a content delivery system which provides local near video on demand storage. In the system, a user is provided with a set-top box 120 that receives content from a network. (Fig. 5). A controller in the set-top box determines how the content is handled, and can send the data to a program receiver 500. Within the program receiver, a control signal corresponding to a particular carrier channel is sent to the tuner, which downconverts the carrier to an intermediate frequency carrier. (Col. 6, ll. 12-18). The signal is then converted into a digital baseband signal by a demodulator, which produces an encrypted MPEG signal. (Col. 6, ll. 18-21). The signal from the demodulator is then sent through a decryption engine which produces a plaintext signal. (Col. 6, ll. 21-23). Thereafter, the controller identifies a desired digital channel, and a digital channel select in the program receiver demultiplexes the signal and removes the desired channel from the plaintext signal. (Col. 6, ll. 26-31). That signal can then be sent to a display interface outside of the program receiver, the display interface including an MPEG-2 decoder to decompress the digital channel to an NTSC format that can be tuned to on a television. (Col. 6, ll. 32-42).

Additionally, the program receiver 500 may also be coupled to a program server 132 which stores programs associated with a content provider, as well as to the display interface which decodes a signal, and the display interface may also be connected directly to the program

² Claim 17 recites a similar apparatus in which an entertainment system includes a display device connected to a set-top box having a similarly arranged set of components. Claim 26 is also similar, but recites a system with closed, "consisting of" language.

server. (Col. 4, ll. 47-48; Fig. 6). For instance, the program server 132 may be stored locally at the set top box, such that it can receive programs from the program receiver and send them to the decoder. (Col. 7, ll. 35-63).

Sie also discloses various other embodiments of a set-top box and/or program receiver with similar components. For instance, *Sie* discloses a system in which, in contrast to the present claims, multiple tuners are included and coupled to a digital demodulator. The demodulators produce signals which are passed through a Select and to the program server. The decryption engine then retrieves data from the program server and sends it to the demultiplexer before a channel is selected and sent to the display interface for decoding. (See Fig. 12B and related text).

In another embodiment similar to that of Figure 5, a tuner connects to a demodulator. The demodulator then transmits its signal to the decryption engine before the signal is sent to the demultiplexer. (See Fig. 13A and related text).

In still another example, the program receiver includes a tuner and demodulator which transmit a signal to the demultiplexer. The demultiplexed signal is then selected and decrypted by the decryption engine before being sent to storage or for decoding. (See Fig. 13B and related text).

Accordingly, *Sie* discloses various systems for recording content, but none of them are arranged to operate in the manner disclosed. Specifically, no system in *Sie* includes a demodulator which passes its processed stream directly to a demultiplexer, after which the demultiplexer transmits its stream directly to a storage medium, as claimed in combination with the other claim elements.

Additionally, and as discussed during the interview, claim 26 has been added to recite the system "consisting of" the recited elements. Claim 22 therefore expressly excludes all other items within the system, such as an intermediate decryption engine and/or select. Providing a recording subsystem within a set-top box in this manner simplifies the system to handle unencrypted signals, which is directly contrary to all the disclosure in *Sie* in which signals are received in an encrypted format.


In view of the foregoing, Applicant respectfully submits that the other rejections to the claims are now moot and do not, therefore, need to be addressed individually at this time. It will be appreciated, however, that this should not be construed as Applicant 'regarding the cited art or the pending application, including any official notice. Instead, Applicant reserves the right to

challenge any of the purported teachings or assertions made in the last action at any appropriate time in the future, should the need arise. Furthermore, to the extent that the Examiner has relied on any Official Notice, explicitly or implicitly, Applicant specifically requests that the Examiner provide references supporting the teachings officially noticed, as well as the required motivation or suggestion to combine the relied upon notice with the other art of record.

In the event that the Examiner finds remaining impediment to a prompt allowance of this application that may be clarified through a telephone interview, the Examiner is requested to contact the undersigned attorney at (801) 533-9800.

Dated this 14th day of November, 2007.

Respectfully submitted,



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